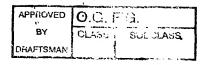


FIG. 1



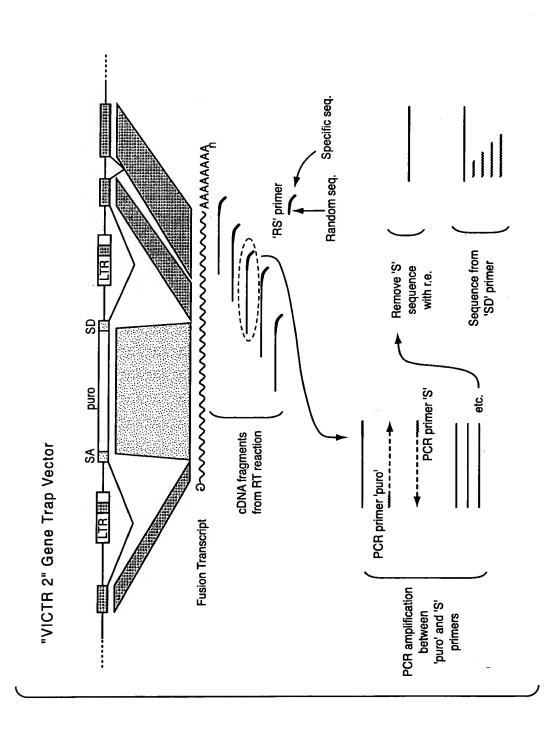
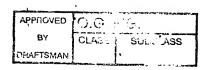


FIG. 2



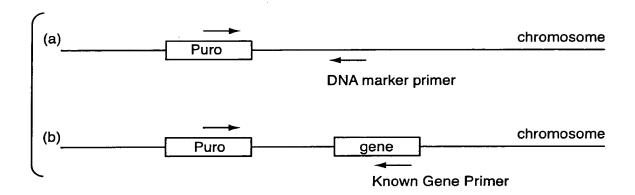


FIG. 3

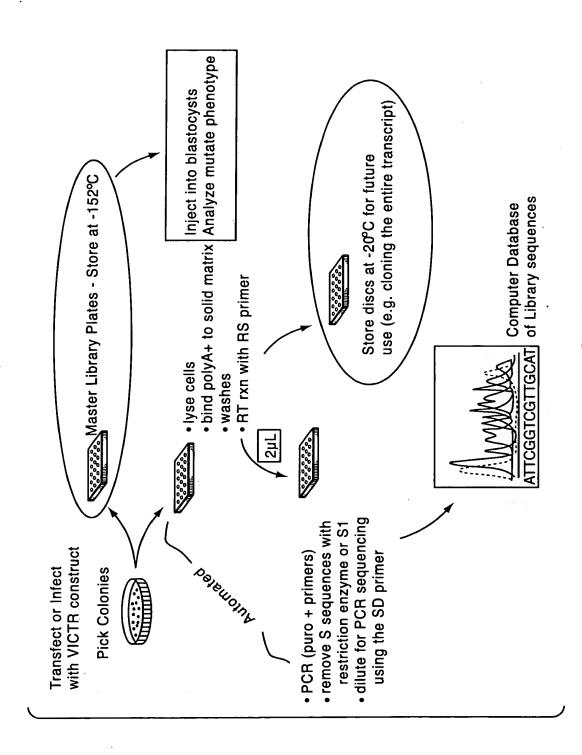
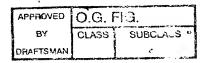
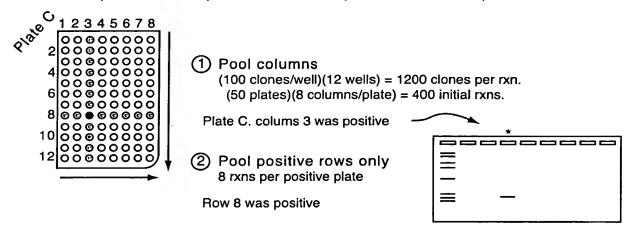


FIG. 4



## **Identify Positive Pool**

To screen all mouse genes (~100,000) with 5-fold redundancy would require about 50 plates of 96-wells (at 100 clones/well).



## Identify Positive Clone

The pool on plate C, column 3, row 8 is thawed and plated as single clones:

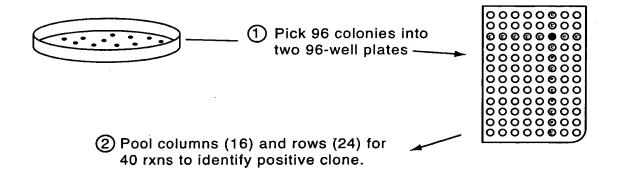
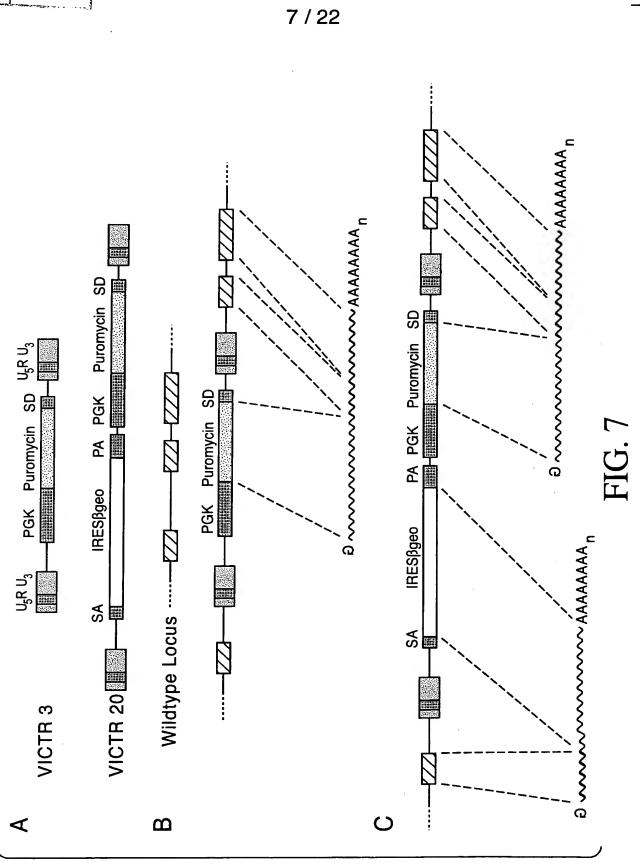


FIG. 5

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| BY        | CLASS  | SUBCLE S. |
| DHAFTSMAN |        |           |

| OST1(SEQ ID NO.: 1):   | 248 TTTATATATATTTAATTTGTTTTACTGGGGTATATATGTGTGAGGAGGACTTCT 302   |
|--|--|
| rat GABA rho3 (SEQ ID NO.: 2):   |  |
| OST2 (SEQ ID NO.: 3):  | 56 ACCGTTGCGGAGGCTCACGTTTCTCAGATAGTACATCAGGTGTCATCGNTGTCAGAAGGT 115  |
| mouse TCR-ATF1 (SEQ ID NO.: 4):  | 75 ACCGTTGCGGGCCTCACGTTCTCAGATAGTACATCAGGTGTCATCGTTATCAGAAAGT 134  |
| OST3 (SEQ ID NO.: 5):  | Σ  |
| Yeast ORF G9365 (SEQ ID NO.: 6):   | GIG+HHAGL ++DR +LF K+Q+LIATSTLAWGVN PAHLVIIKGT+++D K<br>1430 GIGLHHAGLVQKDRSISHQLFQKNKIQILIATSTLAWGVNLPAHLVIIKGTQFFDAKIEG 1489 |
| OST4 (SEQ ID NO.: 7):  | 137 GCGCAGAAGTGGTNCTGGAANTTTNTCCGCCNCCATCCAGTCTATTAATTGTTGACNGGA 196   |
| patent 5470724 (SEQ ID NO.: 8):  | 166 GCGCAGAAGTGGTCCTGCAACTTTATCCGCCTCCATCCAGTCTATTAATTGTTGCCGGGA 225   |
| OST5 (SEQ ID NO.: 9):<br>mouse wnt-5A<br>protein precursor (SEQ ID NO.: 10): | 108 TCWIRLGT*RXVGASLEYEYIRAS 179 TCW++L R VG +L+ +Y A+ 250 TCWLQLADFRKVGDALKEKYDSAA 273  |
| OST6 (SEQ ID NO.: 11):<br>human prolyl                                       | 78 CTTATATGGCTACGGCGGCTTCAACATCTCCATTACACCCAACTACAGCGTGTCCAGGCT 137  |
| endopeptidase (SEQ ID NO.: 12):  | 1407 CTTATATGGCTATGGCGGCTTCAACATATCCATCACCCCAACTACAGTGTTTCCAGGCT 1466  |
| OST7 (SEQ ID NO.: 13):   | 109 AAAGCATGTAGCAGTTGTAGGACACACTAGACGAGAGCACCAGATCTCATTGTGGGTGG  |
| 45S pre rRNA (SEQ ID NO.: 14):   | 1604 AAAGCATGTAGCAGTTGTAGGACACACTAGACGAGAGCACCAGATCTCATTGTGGGTGG   |
| OST8 (SEQ ID NO.: 15):   | 161 TGGATGCAGNCTACCACTGTGTGGCCTATTTTACCTCAGTGCCTCAGTTCTGGAAG 220   |
| rat MAL (SEQ ID NO.: 16):  | 306 TOGATGCAGCCTACCACTGTGTGGCTGCCTGTTTTACCTCAGTGCCTCAGTCCTGGAAG 365  |
| OST9 (SEQ ID NO.: 17):   | 103 ACCTGATTGTTATCCGTGGCCTGCAGAAGTCCAGAAATACAGACCAAAGTCAACCAGTA 162  |
| mouse malic enzyme (SEQ ID NO.: 18):   | 1666 ACCTGATTGTTATCCGTGGCCTGCAGAAGTCCAGAAATACAGACCAAAGTCAACCAGTA 1725  |

FIG 6



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| BY        | CLASS SUE |
| DHAFTSMAN |           |

| OmniBank         | DBIAccession             | pvalue              | Id.        | Sequence Description  |
|------------------|--------------------------|---------------------|------------|---|
| OST4             | gbIW09445                | 5.0e-133            | 96%        | Mus musculus ma63f02.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 315387 5'  |
| OST5             | gblY00746                | 2.6e-41             | 95%        | Mus musculus Mouse mRNA for retinal cyclic-GMP phosphodiesterase gamma-subunit (GMP-PDE) (EC 3.1.4.17)  |
| OST22<br>OST25   | gbID88454<br>gbIU28168   | 5.9e-48<br>1.0e-42  | 83%<br>87% | Mus musculus Mouse mRNA<br>Mus musculus Mus musculus GP106 mRNA,<br>complete cds  |
| OST3O            | gbIAA048968              | 1.9e-173            | 98%        | Mus musculus mj50b06.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 479507 5'   |
| OST36            | gbID29016                | 7.5e-71             | 90%        | Mus musculus Mouse mRNA for squalene synthase   |
| OST38            | gbiX53732                | 3.0e-106            | 95%        | Mus musculus M. musculus T cell receptor alpha chain variable region (V-alpha)  |
| OST41            | gblJ00360                | 1.8e-70             | 10%        | Mus musculus mouse alpha-amylase-2  |
| OST42            | gbIM33190                | 4.0e-34             | 62%        | gene: pancreatic mrna Rattus norvegicus Rat cytochrome P450   |
| OST45            | gb1AA003309              | 1.4e-145            | 99%        | II A3 (CYP2A3) gene, complete cds<br>Mus musculus mg47d10.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 426931 5'  |
| OST51            | gbID86214                | 1.5e-45             | 66%        | Mus musculus House mouse; Musculus domesticus Postnatal (0 day) Brain mRNA for Ca2+ dependent activator protein for secretion, complete cds   |
| OST56            | gbIAA189233              | 2.6e-37             | 97%        | Mus musculus mu52c11.r1 Soares mouse lymph node NbMLN Mus musculus cDNA clone 643028 5' similar to TR:G294850 G294850 ALPHA-MUSCLE ACTIN  |
| OST74            | gblY00169                | 7.5e-112            | 89%        | Rattus norvegicus Rat TM-4 gene for fibroblast tropomyosin 4  |
| OST75            | gb1Z72384                | 1.0e-126            | 95%        | Mus musculus M. musculus Igk-Vk2 (70/3) gene  |
| OST86            | gbIAA190122              | 1.7e-31             | 88%        | Mus musculus mu46f05.r1 Soares mouse lymph node NbMLN Mus musculus cDNA clone 642465 5'   |
| OST95            | gbIAA104745              | 1.8e-178            | 96%        | Mus musculus mo56d03 .rl Life Tech<br>mouse embryo 8 5dpc 10664019 Mus<br>musculus cDNA clone 557573 5' similar<br>to SW:YA36_SCHPO Q09713 HYPOTHETICAL<br>37.7 KD PROTEIN C18B11.06 IN CHR1. |
| OST98            | gbIH33806                | 7.3e-40             | 88%        | Rattus sp. EST110153 Rattus sp. cDNA<br>5' end  |
| OST117           | gbIAA156426              | 4.0e-111            | 97%        | Home sapiens 2151b07.s1 Soares pregnant uterus NbHPU Homo sapiens cDNA clone 505429 3' similar to TR:G632498 G632498 CLEAVAGE STIMULATION FACTOR 77KDA SUBUNIT.                               |
| ST118            | gblD87684                | 8.6e-154            | 84%        | Home sapiens Human mRNA for KIAA0242 gene, partial cds  |
| ST119            | gbID87077                | 2.0e-145            | 92%        | Home sapiens Human mRNA for KIAA0240 gene, partial cds  |
| OST121           | gbID28482                | 3.1e-161            | 83%        | Home sapiens Human scr2 mRNA for RNA binding protein SCR2, complete cds   |
| ST133            | gbIAA114106              | 1.2e-52             | 73%        | Home sapiens zn66h09.r1 Stratagene<br>HeLa cell s3 937216 Homo sapiens cDNA<br>clone 563201 5'  |
| OST154           | gbIAA107843              | 4.0e-128            | 82%        | Mus musculus mo49c06.rl Life Tech<br>mouse embryo 10 5dpc 10665016 Mus<br>musculus cDNA clone 556906 5' similar<br>to gb: J05277 Mouse hexokinase mRNA,<br>complete cds (MOUSE)               |
| OST178           | gbIX05300                | 8.1e-143            | 92%        | Rattus norvegicus Rat mRNA for ribophorin I   |
| ST193            | gblC06148                | 4.8e-107            | 84%        | Homo sapiens similar to glutamyl-tRNA synthetase  |
| ST243            | gblH32146                | 4.8e-38             | 86%        | Rattus sp. cDNA<br>5' end similar to Synapsin I   |
| ST246            | gblAA009152              | 1.8e-81             | 79%        | Mus musculus mh01b09.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 441209 5'   |
| OST268<br>OST280 | gbIM12658<br>gbIAA058245 | 1.2e-91<br>1.5e-141 | 93%<br>94% | Mus musculus Mouse 4.5S RNA gene<br>Mus musculus mg74e11.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 438764 5'   |

FIG. 8a

O.G. FIG.

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| OST281           | gbIU65313              | 1.8e-180           | 98%        | Mus musculus Mus musculus   |
|------------------|------------------------|--------------------|------------|---|
| 031201           | g51005515              | 1.00 100           | 30.0       | ras-GTPase-activating SH3-domain<br>binding protein (G3BP) gene, complete                         |
| OCTOR            | apiv v048300           | 4.2e-60            | 83%        | cds Mus musculus mj29a11.rl Soares mouse  |
| OST295           | gbiAA048390            | 4.26-60            | 0.370      | embryo NbME13.5 14.5 Mus musculus cDNA  |
|                  |                        |                    |            | clone 477500 5' similar to gb:J02809<br>Mouse neutral specific                                    |
|                  |                        |                    |            | calmodulin-binding protein P-57 mRNA,   |
| OST297           | gbIX77585              | 3.0e-168           | 10%        | Mus musculus M. musculus mRNA for   |
| OST300           | gbIM75122              | 1.8e-203           | 98%        | thioredoxin<br>Mus musculus Mouse acid beta-  |
| OST301           | gbIW34850              | 2.7e-97            | 97%        | galactosidase (GLB-1) gene, exon 16 Mus musculus mc62b02.r1 Soares mouse                          |
| 001301           | 65.11.0.1000           | 2                  | 3.70       | embryo NbME13.5 14.5 Mus musculus cDNA  |
|                  |                        |                    |            | clone 353067 5' similar to gb:U11248<br>Mus musculus C57BL/6J ribosomal                           |
|                  |                        |                    |            | protein S28 mRNA, complete  |
| OST311           | gbIW80427              | 3.0e-73            | 85%        | Homo sapeins zd82d06.s1 Soares fetal<br>heart NbHH19W Homo sapiens cDNA clone                     |
|                  |                        |                    |            | 347147 3' similar to PIR: A54766 A54766   |
| OST314           | gblT34710              | 4.0e-54            | 73%        | metastasis-associated protein mta-1 Home sapiens EST73642 Homo sapiens                            |
|                  | gD(134710              |                    |            | cDNA 5' end similar to None   |
| OST316           | gbIW11499              | 1.2e-72            | 99%        | Mus musculus ma80h02 .rl Soares mouse p3NMF19.5 Mus musculus CDNA clone                           |
|                  |                        |                    |            | 317043 5' similar to SW:UCRX_BOVIN  |
|                  |                        |                    |            | P00130 UBIQUINOL-CYTOCHROME C REDUCTASE 7.2 KD PROTEIN  |
| OST328           | gbIW10861              | 3.7e-59            | 89%        | Mus musculus ma55c03.rl Soares mouse  |
|                  |                        |                    |            | p3NMF19.5 Mus musculus CDNA clone<br>314596 5'  |
| OST331           | gbIU17698              | 6.8e-119           | 83%        | Mus musculus Mus musculus ablphilin-1   |
| OST342           | gbIU10120              | 3.1e-143           | 95%        | (abi-1) mRNA, complete cds Mus musculus Mus musculus SKD2 mRNA,                                   |
| OST356           | gblM60456              | 1.8e-117           | 92%        | complete cds<br>Mus musculus Mouse cyclophilin mRNA,  |
|                  | -                      |                    |            | complete cds  |
| OST361           | gbIW77360              | 5.7e-37            | 90%        | Mus musculus me65f11.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 400461 5' |
| OST368           | gbID87662              | 2.9e-184           | 97%        | Mus musculus House mouse; Musculus  |
|                  |                        |                    |            | domesticus mRNA for 14-3-3 tau, complete cds  |
| OST386           | gblX99946              | 2.6e-35            | 85%        | Mus musculus M. musculus 94kb genomic sequence encoding Tsx gene                                  |
| OST389           | gbiT51727              | 1.8e-78            | 89%        | Homo sapiens yb28c11.r1 Home sapiens cDNA clone 72500 5'  |
| OST401           | gblW29220              | 3.1e-33            | 97%        | Mus musculus mc19e08.rl Soares mouse  |
|                  |                        |                    |            | p3NMF19.5 Mus musculus cDNA clone   |
|                  |                        |                    |            | 348998 5' similar to SW:YEFA_ECOLI<br>P32054 GDP-MANNOSE DEHYDRATASE                              |
| OST413           | gbIN48542              | 2 .0e-68           | 78%        | Homo sapiens yy49d07.r1 Homo sapiens cDNA clone 276877 5'   |
| OST418           | gblG21163              | 1.7e-84            | 85%        | Homo saniens human STS WI-15024   |
| OST421<br>OST425 | gblG25365<br>gblX04480 | 6.1e-56<br>8.1e-58 | 86%<br>99% | Homo sapiens human STS EST334292<br>Mus musculus Mouse mRNA for                                   |
|                  | - ·                    |                    |            | preproinsulin-like growth factor IA   |
| OST430           | gblW97937              | 5.7e-93            | 96%        | Mus musculus me73g07.rl Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA                       |
|                  |                        |                    |            | clone 401244 5' similar to gb:M23419 INITIATION FACTOR 5A (HUMAN)                                 |
| OST439           | gbIM26756              | 2.4e-134           | 87%        | Mus musculus Mouse malic enzyme mRNA,   |
|                  |                        | 2.6e-49            | 70%        | complete cds<br>Homo sapiens 15b8 Human retina cDNA   |
| OST442           | gbIW25938              | 2.06-43            | 1 070      | randomly primed sublibrary Homo   |
| OST448           | gbIY07569              | 4.3e-72            | 88%        | sapiens cDNA<br>Homo sapiens H. sapiens mRNA for  |
| OST531           | gbIX95591              | 3.1e-206           | 91%        | PHAPI2a protein Mus musculus M. musculus mRNA for C1D   |
|                  |                        |                    |            | protein Mus musculus me50d06.rl Soares mouse  |
| OST536           | gbIW75435              | 4.6e-75            | 95%        | embryo NbME13.5 14.5 Mus musculus cDNA  |
|                  |                        |                    |            | clone 390923 5' similar to gb:U09659<br>Mus musculus chaperonin 10 mRNA,                          |
|                  |                        |                    |            | complete cds (MOUSE)  |
| OST542           | gblW14808              | 6.8e-216           | 99%        | Mus musculus mb32g03.rl Soares mouse p3NMF19.5 Mus musculus cDNA clone                            |
|                  |                        |                    |            | 331156 5' similar to SW: YEO4_YEAST   |
|                  |                        |                    |            | P32642 HYPOTHETICAL 27.5 KD PROTEIN IN  |

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|                  |                        |                     |            | DADA DAMA INTERCENIC PECION (11)   |
|------------------|------------------------|---------------------|------------|--|
| OST562           | gbIX61433              | 7.6e-68             | 97%        | RAD3-BMH1 INTERGENIC REGION. [1]<br>Mus musculus M. musculus mRNA for                          |
| OST568           | gbIAA007930            | 1.5e-31             | 67%        | sodium/potassium ATPase beta subunit<br>Mus musculus mg64a07.r1 Soares mouse                   |
|                  |                        |                     |            | embryo NbMe13.5 14.5 Mus musculus cDNA clone 437748 5'   |
| OST571           | gbIAA111278            | 2.1e-147            | 92%        | Mus musculus mo53f02.rl Life Tech<br>mouse embryo 10 5dpc 10665016 Mus                         |
|                  |                        |                     | _0.        | musculus cDNA clone 557307 5'  |
| OST572           | gblAA130347            | 1.2e-103            | 85%        | Homo sapiens zo05g10.s1 Stratagene endothelial cell 937223 Homo sapiens                        |
| OST573           | gb1L42855              | 4.0e-69             | 75%        | cDNA clone 566850 3' Rattus norvegicus Rattus norvegicus                                       |
| 031373           | BOIL-12033             | 4.00 03             | 7570       | RNA polymerase II transcription factor<br>SIII P18 submit mRNA, complete cds                   |
| OST577           | gbIAA020459            | 2.1e-91             | 92%        | Mus musculus mh61a06.rl Soares mouse   |
|                  |                        |                     |            | placenta 4NbMP13.5 14.5 Mus musculus cDNA clone 455410 5'                                      |
| OST581           | gbIR96552              | 2.0e-90             | 80%        | Homo sapiens yq54e02.r1 Homo sapiens cDNA clone 199610 5'                                      |
| OST582           | gbID17695              | 1.9e-218            | 91%        | Rattus rattus Rat mRNA for water   |
|                  |                        |                     |            | channel aquaporin 3 (AQP3), complete cds   |
| OST591           | gb1L43326              | 3.6e-103            | 85%        | Mus musculus Mus musculus domesticus coiled-coil protein (CG-1) mRNA,                          |
| OST593           | gbIW70777              | 3.4e-117            | 98%        | complete cds Mus musculus me44a02.r1 Soares mouse  |
| 031393           | gollerorri             | 3.46-117            | 3670       | embryo NbME13.5 14.5 Mus musculus cDNA   |
| OST594           | gblX94616              | 2.6e-142            | 87%        | clone 390314 5'<br>Mus musculus M. musculus mRNA for   |
| OST595           | gblU67137              | 7.0e-51             | 86%        | glycogen synthase<br>Rattus norvegicus Rattus norvegicus                                       |
| 001030           | g01007107              | 7.00 01             | 00,0       | PSD-95/SAP90-associated protein-1 mRNA, complete cds   |
| OST598           | gbIX53476              | 2.2e-235            | 98%        | Mus musculus Mouse mRNA for  |
| OST600           | gbIU70494              | 1.0e-188            | 96%        | non-histone chromosomal protein HMG-14<br>Mus musculus Mus musculus histone                    |
| OST607           | gbIW55702              | 1.2e-71             | 85%        | H2A.Z (H2A.Z) mRNA, complete cds Mus musculus ma35d03.r1 Life Tech                             |
| 00.00            | g                      | 1.20 / 1            |            | mouse brain Mus musculus cDNA clone 312677 5'  |
| OST613           | gbIAA184809            | 9.8e-68             | 97%        | Mus musculus mu45h05.rl Soares mouse lymph node NbMLN Mus musculus cDNA                        |
|                  |                        |                     |            | clone 642393 5' similar to gb:L00993   |
| OST618           | gblH11817              | 1.5e-95             | 86%        | Mus musculus autoantigen La (MOUSE)<br>Homo sapiens ym11f07.r1 Homo sapiens                    |
| OST620           | gbIAA117282            | 1.0e-78             | 83%        | cDNA clone 47592 5' Mus musculus mn25a10.r1 Beddington   |
|                  | · ·                    |                     |            | mouse embryonic region Mus musculus cDNA clone 538938 5' similar to                            |
|                  |                        |                     |            | gb: L35599 Mus musculus Y-box binding protein mRNA, 3' end (MOUSE)                             |
| OST623           | gbIAA001326            | 5.7e-106            | 81%        | Homo sapiens zh83b02.rl Soares fetal   |
|                  |                        |                     | _          | liver spleen 1NFLS S1 Homo sapiens<br>cDNA clone 427851 5'                                     |
| OST626           | gbID83768              | 1.4e-47             | 81%        | Homo sapiens Human clone N9S Rep-8 mRNA, partial cds   |
| OST663           | gbIAA028410            | 3.2e-114            | 88%        | Mus musculus mil9a06.rl Soares mouse p3NMF19.5 Mus musculus cDNA clone                         |
|                  |                        |                     |            | 463954 5' similar to gb:M18775 Mouse   |
|                  |                        |                     |            | tau microtubule binding protein mRNA, complete (MOUSE)   |
| OST664           | gblU11027              | 2.6e-106            | 87%        | Mus musculus Mus musculus C57BL/6J<br>Sec61 protein complex gamma subunit                      |
| OST671           | gbIS64860              | 8.4e-211            | 95%        | mRNA, complete cds<br>Mus sp. NonO=non-POU domain-containing                                   |
| 031071           | g51304000              | 0.46-211            | 3370       | octamer-binding protein [mice, B-cell  |
| OST679           | gbIW14516              | 9.9e-139            | 95%        | leukemia, BCL1, mRNA, 2411 nt] Mus musculus mb24h01.r1 Soares mouse                            |
|                  |                        |                     |            | p3NMF19.5 Mus musculus cDNA clone<br>330385 5'   |
| OST680<br>OST702 | gb1L20258<br>gb1M78893 | 4.2e-232<br>5.7e-52 | 95%<br>85% | Mus musculus Mouse stathmin gene<br>Homo sapiens EST01041 Homo sapiens                         |
| 031702           | PDII:11.0033           | 5.76-52             | 0370       | Homo sapiens EST01041 Homo sapiens cDNA clone HHCPB34 similar to cAMP-regulated phosphoprotein |
| OST707           | gbIH19122              | 1.2e-85             | 82%        | Homo sapiens ym44dll.rl Homo sapiens   |
| OST716           | gbIW62791              | 4.5e-74             | 96%        | cDNA clone 51237 5'<br>Mus musculus md86e09.rl Soares mouse                                    |
|                  |                        |                     |            | embryo NbME13.5 14.5 Mus musculus cDNA clone 375304 5'   |

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|                    |                        |                    |      | (Cx31.1) mRNA, complete cds  |
|--------------------|------------------------|--------------------|------|--|
| OST1096            | gbID87077              | 7.7e-112           | 88%  | Homo sapiens Human mRNA for KIAA0240 gene, partial cds   |
| OST1105            | gbiW44423              | 1.0e-66            | 86%  | Homo sapiens zc28f04.s1 Soares senescent fibroblasts NbHSF Homo  |
| OCT1116            | -LIVC2240              | 2 1 2 2 6          | 80%  | sapiens cDNA clone 323647 3' Mus musculus M. musculus scRNA  |
| OST1116<br>OST1137 | gblX62249<br>gblM63485 | 3.1e-36<br>1.2e-89 | 94%  | Rattus norvegicus Rat matrin 3 mRNA  |
| OST1137            | gblX80040              | 1.4e-128           | 91%  | Mus musculus M. musculus Hesx1 mRNA  |
| OST1152            | gbIW79970              | 6.4e-109           | 10%  | Mus musculus me90d10.r1 Soares mouse   |
| 0311132            | g5((1755))             | 0.16 105           | 10,0 | embryo NbME13.5 14.5 Mus musculus cDNA clone 402835 5' similar to gb:X57351 INTERFERON-INDUCIBLE PROTEIN 1-8D  |
| OST1155            | gbIW10324              | 2.3e-65            | 95%  | Mus musculus me42d11.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 313365 5' similar to gb:M29844 APOLIPOPROTEIN C-II PRECURSOR  |
| OST1165            | gbIW54649              | 1.9e-184           | 97%  | Mus musculus md07b12.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 367679 5'  |
| OST1179            | gbIAA008986            | 8.5e-84            | 94%  | Mus musculus mg99e02.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 441146 5'  |
| OST1186            | gbIU89840              | 2.8e-70            | 96%  | Mus musculus Mus musculus prostate secretory protein (PSP94) mRNA, complete cds  |
| OST1192            | gblW82490              | 5.3e-127           | 96%  | Mus musculus mf04e04.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 404094 5'   |
| OST1207            | gbIAA063763            | 1.3e-56            | 86%  | Mus musculus mj79d10.r1 Soares mouse<br>p3NMF19.5 Mus musculus cDNA clone<br>482323 5'   |
| OST1223            | gblAA002931            | 1.5e-189           | 99%  | Mus musculus mg40f08.rl Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 426279 5'  |
| OST1226            | gbIU37353              | 7.5e-279           | 95%  | Mus musculus Mus musculus protein phosphatase 2A B' alpha3 regulatory subunit mRNA, partial cds  |
| OST1233            | gbIW98701              | 6.3e-91            | 98%  | Mus musculus mg12f05.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 423585 5'  |
| OST1234            | gbID85904              | 1.1e-180           | 98%  | Mus musculus Mouse mRNA for apg-2, complete cds  |
| OST1241            | gbIU09850              | 4.8e-184           | 92%  | Homo sapiens Human zinc finger protein (ZNF143) mRNA, complete cds   |
| OST1247            | gbIAA051266            | 4.7e-126           | 97%  | Mus musculus mj43h02.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 478899 5' similar to SW:L10K_RAT<br>Q05310 LEYDIG CELL TUMOR 10 KD PROTEIN                     |
| OST1265            | gbIX96973              | 6.8e-183           | 96%  | Mus musculus M. musculus mRNA for<br>Lasp-1 protein  |
| OST1267            | gbIR84271              | 1.6e-32            | 86%  | Homo sapiens yq22g02.r1 Soares retina N2b4HR Homo sapiens cDNA clone 274730 5' similar to SP: YPK1_YEAST P12688 SERINE/THREONINE-PROTEIN KINASE YPK1                                   |
| OST1269            | gblU19977              | 4.0e-130           | 84%  | Homo sapiens Human preprocarboxypeptidase A2 (proCPA2)   |
| OST1274            | gblM14634              | 2.1e-139           | 85%  | mRNA, complete cds Rattus norvegicus Rat mitochondrial propionyl-CoA carboxylase (PCCase) beta-subunit mRNA, complete cds  |
| OST1294            | gbIJ03583              | 6.8e-69            | 95%  | Rattus norvegicus Rat clathrin heavy<br>chain mRNA, complete cds   |
| OST1339            | gbIM97190              | 3.1e-118           | 83%  | Homo sapiens Human Sp2 protein mRNA<br>complete cds  |
| OST1341            | gblW89611              | 7.8e-142           | 93%  | Mus musculus mf72h02.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 419859 5'  |
| OST1354            | gbIW74481              | 2.2e-64            | 85%  | Homo sapiens zd75b12.s1 Soares fetal<br>heart NbHH19W Homo sapiens cDNA clone<br>346463 3'   |
| OST1359            | gbIW65672              | 5.1e-35            | 95%` | Mus musculus me13d09.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 387377 5' similar to SW:UBC5_DROME P35128  |
| OST1369            | gbIW62550              | 1.1e-109           | 97%  | UBIQUITIN-CONJUGATING ENZYME E2-17 KD Mus musculus md73e11.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 374060 5' similar to gb:L06039 Mouse platelet endothelial cell |

| OST1376 | gblX63615   | 1.1e-33  | 92% | adhesion molecule 1 Mus musculus M. musculus Camk-2 mRNA for Ca2+/calmodulin dependent protein kinase II beta subunit  |
|---------|-------------|----------|-----|--|
| OST1387 | gbIC15521   | 6.5e-57  | 93% | Homo sapiens Human fetal brain cDNA  |
| OST1410 | gbIW59607   | 4.8e-77  | 89% | 5'-end GEN-149C01<br>Mus musculus md73a06.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 374002 5'   |
| OST1419 | gblW10923   | 1.2e-122 | 97% | Mus musculus ma40al1.rl Soares mouse p3NMF19.5 Mus musculus cDNA clone 313148 5'   |
| OST1432 | gbIW89889   | 1.7e-145 | 94% | Mus musculus mf77f07.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 420325 5'  |
| OST1453 | gblC18312   | 5.6e-92  | 86% | Homo sapiens Human placenta cDNA<br>5'-end GEN-560D09  |
| OST1457 | gbIR78851   | 5.9e-45  | 80% | Homo sapiens yi90f03.r1 Homo sapiens cDNA clone 146525 5'  |
| OST1470 | gblJ05504   | 1.5e-136 | 95% | Mus musculus Mouse guanylate cyclase/atrial natriuretic factor receptor mRNA, complete cds   |
| OST1478 | gblU57821   | 8.4e-55  | 80% | Mus musculus Mus musculus inhibitor of<br>MyoD family-b (I-mf) mRNA, complete<br>cds   |
| OST1488 | gbIU24681   | 4.3e-235 | 94% | synthetic construct Synthetic NAHD: cytochrome c reductase fusion protein mRNA, complete cds   |
| OST1492 | gblW10703   | 3.6e-109 | 98% | Mus musculus ma53g05.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 314456 5'   |
| OST1493 | gbIAA097483 | 3.5e-197 | 98% | Mus musculus mk17d04.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 493159 5' similar to gb:L05093 60S RIBOSOMAL PROTEIN L18A (HUMAN)   |
| OST1499 | gblT51184   | 1.3e-60  | 94% | Homo sapiens yb94h05.r1 Homo sapiens cDNA clone 78873 5'   |
| OST1504 | gbIL34260   | 1.7e-196 | 91% | Mus musculus Mus musculus integral membrane protein 1 (ltm1) mRNA, complete cds  |
| OST1508 | gblL03306   | 1.8e-164 | 94% | Mus musculus Mus musculus core-binding factor mRNA sequence  |
| OST1520 | gbIW18420   | 4.7e-37  | 88% | Mus musculus mb68e07.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 334596 5' similar to PIR:JH0457 JH0457  |
| OST1523 | gblU23769   | 7.2e-195 | 92% | 80K nuclear protein - human<br>Rattus norvegicus Rattus norvegicus   |
| OST1554 | gblW85270   | 2.3e-168 | 96% | CLP36 (clp36) mRNA, complete cds<br>Mus musculus mf42d05.rl Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 407721 5' similar to<br>SW:IPYR_BOVIN P37980 INORGANIC |
| OST1556 | gbIAA117514 | 9.7e-150 | 89% | PYROPHOSPHATASE Mus musculus mn29c09.r1 Beddington mouse embryonic region Mus musculus cDNA clone 539344 5'  |
| OST1558 | gbIH33765   | 2.2e-67  | 86% | Rattus sp. EST110085 Rattus sp. cDNA   |
| OST1567 | gb U14636   | 1.7e-39  | 94% | 5' end Mus musculus Mus musculus serine/threonine protein kinase DLK mRNA, complete cds  |
| OST1601 | gblW39611   | 1.3e-89  | 85% | Homo sapiens zc19e08.r1 Soares<br>parathyroid tumor NbHPA Homo sapiens<br>cDNA clone 322790 5'   |
| OST1603 | gbIW09922   | 4.0e-109 | 86% | Mus musculus ma67e08.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 315782 5' similar to PIR:S48566 S48566  |
| OST1628 | gbIU51239   | 7.9e-78  | 93% | hypothetical protein L8167.23 - yeast Mus musculus Mus musculus lysosomal-associated multitransmembrane protein (LAPTm5) mRNA, complete cds  |
| OST1649 | gbIAA049090 | 7.9e-158 | 96% | Mus musculus mj46e07.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 479172 5'  |
| OST1653 | gbIAA030795 | 5.1e-143 | 97% | Mus musculus mi27f12.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 464783 5'  |
| OST1658 | gbIW12941   | 5.2e-95  | 97% | Mus musculus ma89d07.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone   |

| APPROYED  | O.G. FIG. |  |  |  |
|-----------|-----------|--|--|--|
| BY        | CLASS     | SUBCLASS   |  |  |
| DRAFTSMAN |           | THE RESERVE TO SERVE THE PROPERTY OF THE PROPE |  |  |

| OCT 2110 | gbIAA051277 | 6.5e-138 | 97%  | Mus musculus mj43h08.r1 Soares mouse   |
|----------|-------------|----------|------|--|
| OST2110  | gbiAA031277 | 0.36-136 | 9170 | embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 478911 5' similar to gb:Y00764<br>UBIQUINOL-CYTOCHROME C REDUCTASE 11 KD<br>PROTEIN (HUMAN)  |
| OST2112  | gbIW85170   | 4.7e-118 | 96%  | Mus musculus mf43f03.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus CDNA<br>clone 407837 5' similar to gb:K00558<br>TUBULIN ALPHA-1 CHAIN (HUMAN)                                      |
|          |             |          |      | gb:M13441 Mouse alpha-tubulin isotype<br>M-alpha-6 mRNA, complete cds  |
| OST2116  | gbIX76453   | 2.4e-66  | 86%  | Rattus norvegicus R. norvegicus<br>(Sprague Dawley) H-rev107 mRNA  |
| OST2126  | gbIW99867   | 1.8e-35  | 85%  | Mus musculus mg30b02.rl Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 425259 5'  |
| OST2134  | gblW14081   | 5.2e-109 | 98%  | Mus musculus ma64g01.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 315504 5' similar to PIR:S50866 S50866 4E-BP1 protein-human   |
| OST2141  | gbIH91351   | 3.8e-40  | 79%  | Homo sapiens yu87c07.r1 Homo sapiens cDNA clone 240780 5'  |
| OST2165  | gbiW64236   | 1.7e-144 | 93%  | Mus musculus md95a11.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 385724 5'  |
| OST2174  | gbIU85055   | 1.1e-67  | 93%  | Mus musculus Mus musculus rap1/rap2 interacting protein mRNA, complete cds   |
| OST2177  | gblW99250   | 1.9e-122 | 86%  | Mus musculus mf60h04.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 418711 5'  |
| OST2182  | gbIS79780   | 1.4e-55  | 93%  | Mus sp. DP-3=proten in regulating cell cycle transcription factor DRTF1/E2F  |
| OST2188  | gblW10048   | 2.3e-86  | 97%  | [mice, pl-2, F9 EC, mRNA, 1380 nt] Mus musculus ma67b07.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone  |
| OST2191  | gblU46854   | 5.4e-61  | 95%  | 315733 5' similar to gb:L02547 CLEAVAGE STIMULATION FACTOR, 50 KD SUBUNIT (HUMAN) Mus musculus Mus musculus ShcC mRNA, complete cds  |
| OST2198  | gbIT25302   | 3.1e-33  | 69%  | Homo sapiens EST039R Homo sapiens cDNA clone BL29-39R  |
| OST2218  | gblW38136   | 4.1e-112 | 97%  | Homo sapiens zc14a11.s1 Soares<br>parathyroid tumor NbHPA Homo sapiens<br>cDNA clone 322268 3'   |
| OST2220  | gbIAA049140 | 6.0e-153 | 93%  | Mus musculus mj49c04.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 479430 5' similar to SW:SYB TORCA P13701 SYNAPTOBREVIN   |
| OST2229  | gbIAA014563 | 2.8e-109 | 94%  | Mus musculus mi67c05.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 468584 5'  |
| OST2236  | gblS63758   | 2.4e-93  | 96%  | Mus sp. metallothionein-I gene transcription activator [mice, L cells. mRNA. 509 nt]   |
| OST2237  | gbIAA002285 | 1.7e-33  | 10%  | Mus musculus mg42c06.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 426442 5' similar to SW:YB81_YEAST P38326 HYPOTHETICAL 34.3 KD PROTEIN IN PDB1-ABD1 INTERGENIC REGION. [1] |
| OST2250  | gbIW71063   | 2.0e-137 | 96%  | Mus musculus me31e02.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 389114 5'  |
| OST2269  | gbIU46027   | 3.1e-119 | 94%  | Mus musculus Mus musculus CREB transcription factor, novel spliced form, mRNA, partial cds   |
| OST2273  | gbIU33005   | 9.9e-111 | 94%  | Mus musculus Mus musculus tbc1 mRNA, complete cds  |
| OST2275  | gbIW30226   | 1.7e-114 | 95%  | Mus musculus mc25h04.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 349591 5' similar to SW:CICP_BOVIN p35526 CHLORINE CHANNEL PROTEIN P64.   |
| OST2285  | gblW33930   | 1.2e-43  | 92%  | Mus musculus mb54c08.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 333230 5' similar to gb:D13315  |
| OST2286  | gbIW82037   | 8.3e-85  | 96%  | LACTOYLGLUTATHIONE LYASE (HUMAN) Mus musculus me94d11.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 403221 5' similar to  |

FIG. 8f

| APPROVED  | O:G. I | FIG.       |
|-----------|--------|------------|
| BY        | CLASS  | SUBCLASS · |
| DHAFTSMAN |        | ,          |

|         |             |          |     | SW:YA9E_SCHPO Q09790 HYPOTHETICAL 23.7<br>KD PROTEIN C13G6.14 IN CHROMOSOME I.   |
|---------|-------------|----------|-----|--|
| OST2297 | gbIF07734   | 7.8e-34  | 86% | Homo sapiens H. sapiens partial cDNA sequence; clone c-2gb07   |
| OST2307 | gblX61399   | 7.0e-66  | 92% | Mus musculus Mouse F52 mRNA for a novel protein  |
| OST2321 | gbiAA100747 | 5.1e-85  | 78% | Homo sapiens zl91h04.r1 Stratagene   |
|         |             |          |     | colon (#937204) Homo sapiens cDNA<br>clone 512023 5'   |
| OST2322 | gblJ02811   | 1.2e-81  | 92% | Rattus sp. Rat myoadenylate deaminase (AMP deaminase) mRNA, complete cds   |
| OST2346 | gbIAB000893 | 1.5e-95  | 94% | Mus musculus Mouse mRNA for synaptotagmin 3, complete cds  |
| OST2347 | gbID17653   | 2.5e-101 | 85% | Mus musculus Mouse mRNA for HBp15/L22, complete cds  |
| OST2353 | gbIT80097   | 7.4e-73  | 85% | Homo sapiens yd04g12.r1 Homo sapiens   |
| OST2357 | gbIW30066   | 4.1e-133 | 99% | cDNA clone 24692 5' Mus musculus mc23a09.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 349336 5'   |
| OST2361 | gblW18873   | 7.5e-58  | 95% | Mus musculus mc04d04.rl Soares mouse p3NMF19.5 Mus musculus cDNA clone 337927 5'   |
| OST2367 | gblX97831   | 1.9e-104 | 85% | Rattus norvegicus R. norvegicus mRNA for carnitine/acylcarnitine carrier protein   |
| OST2368 | gblAA013837 | 6.1e-32  | 77% | Mus musculus mh24c06.rl Soares mouse placenta 4NbMP13.5 14.5 Mus musculus cDNA clone 443434 5'   |
| OST2379 | gblL10911   | 1.2e-105 | 91% | Homo sapiens Homo sapiens splicing factor (CC1.4) mRNA, complete cds   |
| OST2380 | gblW87091   | 9.5e-88  | 90% | Mus musculus mf58d10.rl Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 418483 5'  |
| OST2381 | gbIAA080090 | 8.3e-126 | 96% | Mus musculus mj98h06.r1 Soares mouse<br>p3NMF19.5 Mus musculus cDNA clone<br>484187 5'   |
| OST2382 | gbIAA015380 | 5.1e-126 | 92% | Mus musculus mg94g12.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 440710 5' similar to gb:M31690<br>Mouse argininosuccinate synthetase   |
| OST2389 | gbIU85614   | 2.0e-59  | 91% | Mus musculus Mus musculus SRG3 mRNA, complete cds  |
| OST2395 | gbIAA122609 | 5.0e-138 | 10% | Mus musculus mn25h06.rl Beddington<br>mouse embryonic region Mus musculus<br>cDNA clone 539003 5'  |
| OST2400 | gblW34469   | 4.2e-122 | 86% | Mus musculus ma98e09.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 318760 5'   |
| OST2401 | gbIAA049859 | 3.7e-83  | 91% | Mus musculus mj13d01.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 475969 5' similar to SW:YAQ6_SCHPO Q10106 HYPOTHETICAL 29.7  |
| OST2416 | gbIW14179   | 3.1e-54  | 94% | KD PROTEIN C18G6.06 IN CHROMOSOME I. Mus musculus mb38b08.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 331671 5'  |
| OST2418 | gbIN25844   | 1.3e-47  | 81% | Homo sapiens yx22f02.r1 Homo sapiens<br>cDNA clone 262491 5'   |
| OST2433 | gbIAA104747 | 2.4e-164 | 97% | Mus musculus mo56e01.r1 Life Tech mouse embryo 8 5dpc 10664019 Mus musculus cDNA clone 557592 5' similar to gb: M31642 HYPOXANTHINE-GUANINE PHOSPHORIBOSYLTRANSFERASE (HUMAN); gb: J00423 mouse hypoxanthine |
| OST2442 | gbIW35819   | 1.7e-55  | 91% | phosphoribosyltransferase (hprt) mrna<br>Mus musculus mc14g04.r1 Soares mouse<br>p3NMF19.5 Mus musculus cDNA clone<br>348534 5'  |
| OST2447 | gbIAA061741 | 1.0e-58  | 94% | Mus musculus mj90b07.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 483349 5' similar to WP:C32A3.3   |
| OST2455 | gbIAA167801 | 4.2e-62  | 90% | CE05343 COILED COIL DOMAINS<br>Homo sapiens zq38c06.r1 Stratagene hNT<br>neuron (#937233) Homo sapiens cDNA  |
| OST2459 | gbIU05333   | 3.4e-119 | 96% | clone 631978 5' Mus musculus Mus musculus co-chaperonin 'cofactor A' mRNA, complete cds  |
| OST2464 | gbIW85263   | 1.8e-116 | 94% | Mus musculus mf45h09.r1 Soares mouse   |

FIG. 8g

| APPROVED  | O.G. I             | FIG.     |
|-----------|--------------------|----------|
| BY        | CLASS              | SUBCLASS |
| DHAFTSMAN | THE PARTY LANGUAGE |          |

| <u> </u>         |             |          |     | LPS-binding protein   |
|------------------|-------------|----------|-----|---|
| OST2829          | gblAA002649 | 7.7e-90  | 94% | Mus musculus mg38g06.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 426106 5' similar to<br>SW:MSE5_HUMAN Q00587 SERUM PROTEIN  |
| OST2834          | gbIU57692   | 1.4e-222 | 97% | MSE55. [1] Mus musculus Mus musculus N-terminal asparagine amidohydrolase (Ntan1)   |
| OST2835          | gbIAA060795 | 2.1e-89  | 97% | mRNA, complete cds Mus musculus mj79d05.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 482313 5' similar to WP:F42H10.4  |
| OST2839          | gbIAA163971 | 6.0e-61  | 70% | CE00166 CRIP Mus musculus ms40a01.r1 Life Tech mouse embryo 13 5dpc 10666014 Mus musculus cDNA clone 613992 5'  |
| OST2842          | gbIW54515   | 6.1e-64  | 91% | Mus musculus md09a10.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 367866 5' similar to gb:U07151  |
| OST2877          | gbIJ03583   | 1.3e-66  | 93% | ADP-RIBOSYLATION FACTOR-LIKE PROTEIN 3 Rattus norvegicus Rat clathrin heavy   |
| OST2883          | gbIW34850   | 4.8e-75  | 93% | chain nRNA, complete cds Mus musculus mc62b02.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 353067 5' similar to gb:U11248   |
|                  |             |          |     | Mus musculus C57BL/6J ribosomal protein S28 mRNA, complete (MOUSE)  |
| OST2892          | gbIW97758   | 1.4e-125 | 98% | Mus musculus mg01e10.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 422538 5' similar to<br>gb:J04823_rnal CYTOCHROME C OXIDASE   |
| OST2897          | gblW11047   | 7.9e-132 | 97% | POLYPEPTIDE VIII-LIVER/HEART Mus musculus ma78d10.r1 Soares mouse P3NMF19.5 Mus musculus cDNA clone   |
| OST2909          | gbIAA166258 | 8.9e-120 | 96% | 316819 5' Mus musculus ms49c09.r1 Life Tech mouse embryo 13 5dpc 10666014 Mus musculus cDNA clone 614896 5'   |
| OST2911          | gbIU73478   | 1.4e-117 | 86% | Mus musculus Mus musculus acidic nuclear phosphoprotein pp32 mRNA, complete cds   |
| OST2914          | gbIU12236   | 4.0e-136 | 95% | Mus musculus Mus musculus AKR alpha<br>M290 integrin mRNA, complete cds   |
| OST2916          | gbID77002   | 1.4e-67  | 92% | Mus musculus Mouse embryonal carcinoma<br>F9 cell cDNA, 93E10   |
| OST2921          | gbIW75740   | 8.4e-106 | 98% | Mus musculus me55b06.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 391379 5'   |
| OST2922          | gblD50544   | 8.4e-135 | 88% | Homo sapiens Human lymphocyte mRNA for TFIID subunit p22, complete cds  |
| OST2923          | gblW85631   | 3.2e-108 | 97% | Mus musculus mf37b01.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 407209 5'   |
| OST2926          | gbIW59561   | 6.3e-164 | 94% | Mus musculus md72g01.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 373968 5'   |
| OST2929          | gbIW75735   | 3.0e-92  | 92% | Mus musculus me50h12.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 390983 5'   |
| OST2934          | gblM82904   | 1.8e-75  | 93% | Mus musculus Mouse myotonic dystrophy region mRNA   |
| OST2940          | gbIAA154635 | 1.4e-114 | 97% | Mus musculus mn44c11.rl Beddington<br>mouse embryonic region Mus musculus<br>cDNA clone 540788 5' similar to<br>gb:X83590 M. musculus mRNA for  |
| OST2942          | gbIW34882   | 1.4e-91  | 96% | ribosomal protein L5, 3' end<br>Mus musculus mc40a05.r1 Soares mouse<br>p3NMF19.5 Mus musculus cDNA clone   |
| OST29 <u>4</u> 8 | gbIAA108292 | 5.1e-32  | 81% | 350960 5' Rattus norvegicus EST0035 rat lambda ZAPII library (C.P. Hamel) Rattus norvegicus cDNA clone pC093 5' similar   |
| OST2953          | gЫW10606    | 1.8e-97  | 98% | to ADP-ribosylation factor (ARF)-like protein Mus musculus ma44d11.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 313557 5' similar to PIR:JS0738 JS0738 ATPase inhibitor protein precursor, |
| OST2956          | gblAA049172 | 3.1e-137 | 97% | mitochondrial - rat [1]<br>Mus musculus mj46d07.r1 Soares mouse   |

FIG. 8h

C.G. FIG.

|                    |                          |                     |            | embryo NbME13.5 14.5 Mus musculus cDNA clone 479149 5' similar to WP:F45E12.4   |
|--------------------|--------------------------|---------------------|------------|---|
|                    |                          |                     |            | CE02740   |
| OST2963            | gbIW04744                | 4.2e-31             | 80%        | Homo sapiens za79c08.r1 Soares fetal<br>lung NbHL19W Homo sapiens cDNA clone<br>298766 5'   |
| OST2971            | gbIAA120487              | 9.2e-107            | 10%        | Mus musculus mn12f07.r1 Beddington<br>mouse embryonic region Mus musculus<br>cDNA clone 537733 5' similar to  |
|                    |                          |                     |            | SW:YBNS_YEAST P38219 HYPOTHETICAL 44.2<br>KD PROTEIN IN SCO2-MRF1 INTERGENIC<br>REGION.   |
| OST2974            | gbIU33553                | 2.6e-102            | 88%        | Rattus norvegicus Rattus norvegicus<br>neuroglycan C precursor mRNA, complete<br>cds  |
| OST2977<br>OST2981 | gbIX97755<br>gbIAA206420 | 6.1e-164<br>1.2e-71 | 97%<br>85% | Mus musculus M. musculus mRNA MSI<br>Homo sapiens zq51b02.s1 Stratagene<br>neuroepithelium (#937231) Homo sapiens<br>cDNA clone 645099 3' similar to<br>TR:G972006 G972006 MRNA; EXPRESSED                          |
| OST2983            | gbIW49206                | 1.8e-119            | 98%        | SEQUENCE TAG Mus musculus mc91g12.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 355942 5' similar to PIR:S44900 S44900 ZK652.10 protein  |
| OST2987            | gbIAA027683              | 2.3e-134            | 96%        | Caenorhabditis elegans Mus musculus mi12b01.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone   |
| OST2988            | gblX52129                | 2.2e-52             | 73%        | 463273 5' Mus musculus domesticus Mouse testis-specific mRNA pBs6.2   |
| OST2989            | gbIAA152050              | 1.3e-46             | 78%        | Homo sapiens z148b12.r1 Soares<br>pregnant uterus NbHPU Homo sapiens<br>cDNA clone 505151 5' similar to   |
| OST2991            | gbIAA003171              | 8.4e-151            | 93%        | gb:M90356_cds1 TRANSCRIPTION FACTOR<br>BTF3 (HUMAN)<br>Mus musculus mg56h09.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 437057 5' similar to gb:M24194<br>GUANINE NUCLEOTIDE-BINDING PROTEIN |
| OST2994            | gbIR51546                | 1.9e-51             | 83%        | BETA SUBUNIT-LIKE PROTEIN (HUMAN);<br>gb:X75313 M. musculus<br>Homo sapiens yg72h12.r1 Homo sapiens<br>cDNA clone 38905 5' similar to   |
| OST2996            | gbIX99921                | 1.6e-82             | 10%        | SP:VILI_CHICK P02640 Mus musculus M. musculus mRNA for S100 calcium-binding protein A13   |
| OST2998            | gbID19012                | 3.2e-48             | 10%        | Mus musculus Mouse 3'-directed cDNA,<br>MUSGS01209, clone mc0315  |
| OST3003            | gblU27502                | 1.3e-169            | 97%        | Mus musculus Mus musculus lens major intrinsic protein (MIP) mRNA, complete cds   |
| OST3004            | gbIAA103385              | 1.9e-162            | 98%        | Mus musculus mo23f02.r1 Life Tech<br>mouse embryo 13 5dpc 10666014 Mus<br>musculus cDNA clone 554427 5' similar<br>to gb:Z15030_rna1 MYOSIN REGULATORY<br>LIGHT CHAIN 2, VENTRICULAR (HUMAN);                       |
| OST3011            | gbIAA035805              | 1.2e-98             | 99%        | gb:X65979 M. musculus PLRLC-A mRNA for<br>myosin light chain 2 (MOUSE)<br>Mus musculus mi53a10.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 467226 5' similar to PIR:S28237                   |
| OST3017            | gbIAA050908              | 4.8e-123            | 92%        | S28237 NADH dehydrogenase<br>Mus musculus mj21e02.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 476762 5' similar to SW:AP17_RAT<br>O00380 CLATHRIN COAT ASSEMBLY PROTEIN                      |
| OST3018            | gbID83277                | 2.2e-235            | 99%        | AP17 Mus musculus Mouse DNA for small GTP-binding protein S10, exon2 and  |
| OST3032            | gbIU49385                | 2.1e-76             | 99%        | complete cds Mus musculus Mus musculus CTP synthetase homolog (CTPsH) mRNA, complete cds  |
| OST3035            | gbiL08651                | 1.8e-115            | 90%        | Mus musculus Mus musculus large ribosomal subunit protein mRNA,   |
| OST3037            | gbIW90956                | 4.5e-34             | 74%        | complete cds<br>Mus musculus mf84h05.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 421017 5'   |

FIG. 8i

| APPROVED  | C.G. f | -iG.      |
|-----------|--------|-----------|
| BY        | CLASS  | SUBCLASS' |
| DHAFTSMAN |        |           |

| OST3305 | gbID88453<br>gbIU78109 | 1.0e-106<br>9.7e-59 | 87%<br>66% | Mus musculus Mouse mRNA Mus musculus Mus musculus  |
|---------|------------------------|---------------------|------------|--|
| OST3312 | g01076109              |                     |            | prepro-neurturin mRNA, complete cds  |
| OST3323 | gbID43643              | 1.2e-132            | 91%        | Mus musculus Mouse YL-1 mRNA for YL-1 protein (nuclear protein with  |
| OST3324 | gblX61399              | 2.2e-51             | 87%        | DNA-binding ability), complete cds Mus musculus Mouse F52 mRNA for a   |
| OST3325 | gbID28476              | 6.5e-103            | 94%        | novel protein<br>Homo sapiens Human mRNA for KIAA0045  |
| OST3349 | gbIM18210              | 2.2e-52             | 94%        | gene, complete cds Mus musculus Mouse transcription factor S-II, clone PSII-3  |
| OST3352 | gbIAA099569            | 4.9e-63             | 77%        | Homo sapiens zk86b04.s1 Soares<br>pregnant uterus NbHPU Homo sapiens   |
| OST3354 | gbIW53638              | 9.1e-69             | 92%        | cDNA clone 489679 3' Mus musculus md14d10.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 368371 5' similar to  |
| OST3355 | gbIU49185              | 4.1e-40             | 82%        | SW:RNG3_HUMAN P25440 RING3 PROTEIN. [1] Mus musculus Musculus occludin   |
| OST3366 | gbIAA122835            | 2.1e-85             | 69%        | mRNA, complete cds Mus musculus mn24g03.r1Beddington   |
|         |                        | ·                   |            | mouse embryonic region Mus musculus CDNA clone 538900 5' similar to gb:D00682 COFILIN (HUMAN); gb:D00472 Mouse mRNA for cofilin, complete cds and flanks (MOUSE)   |
| OST3370 | gblS67058              | 4.6e-106            | 94%        | Mus sp. Hoxa-4/Hox-1.4=Hoxa-4 [mice, Genomic, 2556 nt]   |
| OST3371 | gblW31107              | 1.5e-50             | 71%        | Homo sapiens zb85e12.r1 Soares<br>senescent fibroblasts NbHSF Homo<br>sapiens cDNA clone 310414 5'   |
| OST3372 | gbIW64859              | 2.2e-134            | 99%        | Mus musculus me06f10.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 386731 5' similar to PIR:A55012<br>A55012 signal peptidase 25k chain -     |
| OST3375 | gbIAA015237            | 4.0e-44             | 10%        | Mus musculus mh30a10.r1 Soares mouse placenta 4NbMP13.5 14.5 Mus musculus  |
| OST3376 | gbIM27347              | 4.2e-103            | 99%        | CDNA clone 443994 5'<br>Mus musculus Mus musculus p6-5 gene,<br>3' end   |
| OST3388 | gbID50264              | 1.9e-117            | 98%        | Mus musculus Mouse mRNA for phosphatidylinositol glycan class F,   |
| OST3390 | gblW34022              | 3.6e-46             | 78%        | complete cds Mus musculus mb01d09.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone  |
| OST3393 | gbIU60330              | 1.7e-208            | 93%        | 318929 5'<br>Mus musculus Mus musculus Ki antigen  |
| OST3404 | gbIAA168895            | 6.3e-109            | 98%        | mRNA, complete cds<br>Mus musculus ms41g02.r1 Life Tech<br>mouse embryo 13 5dpc 10666014 Mus<br>musculus cDNA clone 614162 5' similar                              |
| OST3413 | gbIN91837              | 3.3e-39             | 91%        | to gb:M23419 INITIATION FACTOR 5A<br>Homo sapiens zb45f03.s1 Soares fetal<br>lung NbHL19W Homo sapiens cDNA clone  |
| OST3425 | gbIW71116              | 1.3e-105            | 88%        | 306557 3' Mus musculus me31d05.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA  |
| OST3428 | gbIAA189339            | 3.4e-37             | 88%        | clone 389097 5' Mus musculus mt79g04.r1 Soares mouse lymph node NbMLN Mus musculus cDNA  |
| OST3441 | gbIS51858              | 7.9e-66             | 77%        | clone 636150 5' Mus sp. MO25 gene [mice, embryos,  |
| OST3450 | gbiX58426              | 7.1e-53             | 96%        | mRNA, 2322 nt] Mus musculus Mouse mRNA for hepatic   |
| OST3457 | gb!W87064              | 9.0e-166            | 97%        | triglyceride lipase Mus musculus mf58h05.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA  |
| OST3460 | gbIAA185213            | 4.2e-134            | 99%        | clone 418521 5' Mus musculus mu51g08.r1 Soares mouse lymph node NbMLN Mus musculus cDNA clone 642974 5' similar to TR:E243948 E243948 CHROMOSOME VII READING FRAME |
| OST3480 | gbiAA118567            | 9.4e-100            | 89%        | ORF YGL054C. Mus musculus mn12a08.r1 Beddington mouse embryonic region Mus musculus  |
| OST3481 | gbIX56906              | 1.0e-121            | 95%        | cDNA clone 537686 5' Mus musculus Mouse OP-1 mRNA for osteogenic protein 1   |

FIG. 8j

| APPI OVED | ن.G. ا | FIG.     |
|-----------|--------|----------|
| BY        | CLASS  | SUBCLASS |
| DHAFTSMAN |        |          |

| OST3483 | gbIX79446   | 1.4e-114 | 92% | Mus musculus M. musculus Odf1 mRNA for outer dense fiber protein of sperm tails  |
|---------|-------------|----------|-----|--|
| OST3485 | gblD83824   | 1.4e-75  | 86% | Homo sapiens similar to T<br>cell-specific MAL   |
| OST3492 | gbIW09518   | 4.7e-139 | 92% | Mus musculus ma08d09.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone   |
| OST3494 | gbIW61666   | 1.1e-138 | 99% | 303953 5' Mus musculus md82d01.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 374881 5' similar to SW:GBG5_BOVIN P30670 GUANINE NUCLEOTIDE-BINDING PROTEIN |
| OST3500 | gbIU62483   | 2.1e-180 | 98% | G(I)/G(S)/G(O) GAMMA-5 SUBUNIT. [1] Mus musculus Mus musculus ubiquitin conjugating enzyme (ubc4) mRNA, complete cds   |
| OST3501 | gbID59851   | 6.8e-54  | 90% | Homo sapiens Human fetal brain cDNA<br>5' - end GEN-070H03   |
| OST3505 | gbIW40883   | 3.9e-173 | 99% | Mus musculus mc39d07.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 350893 5'   |
| OST3508 | gblM23458   | 2.0e-119 | 90% | Mus musculus Mus musculus endogenous retroviruslike B-26 (distantly related to MulV) LTR   |
| OST3516 | gblL14441   | 5.4e-177 | 90% | Rattus norvegicus Rat<br>phosphotidylethanolamine<br>N-methyltransferase mRNA, complete cds  |
| OST3517 | gbIAA015044 | 5.5e-114 | 97% | Mus musculus mh23f10.r1 Soares mouse placenta 4NbMP13.5 14.5 Mus musculus cDNA clone 443371 5'   |
| OST3518 | gbIAA061165 | 6.3e-99  | 91% | Mus musculus mj31f05.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 477729 5' similar to TR:E222933<br>E222933 SUPEROXIDE DISMUTASE                  |
| OST3521 | gbIH33756   | 3.7e-70  | 87% | Rattus sp. EST110066 Rattus sp. cDNA<br>3' end   |
| OST3531 | gbIU19893   | 6.7e-34  | 80% | Rattus norvegicus Rattus norvegicus alpha actinin mRNA, complete cds   |
| OST3534 | gbIU37150   | 5.7e-31  | 83% | Bos taurus Bos taurus peptide<br>methionine sulfoxide reductase (msrA)<br>mRNA, complete cds   |
| OST3545 | gbIM93148   | 4.0e-103 | 84% | Mus musculus Mouse homeobox protein (Hox-1.11) gene, complete cds  |
| OST3556 | gbIW08748   | 1.9e-129 | 97% | Mus musculus mb48f02.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 332667 5'   |
| OST3558 | gbIL03386   | 7.9e-132 | 97% | Rattus norvegicus Rattus norvegicus (clone RAHB2-5/8) zinc finger protein mRNA, 3' end cds   |
| OST3561 | gbIW13785   | 5.1e-64  | 99% | Mus musculus ma94c11.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 318356 5' similar to SW:RS27_RAT  |
| OST3567 | gbIAA050004 | 2.8e-48  | 78% | P24051 40S RIBOSOMAL PROTEIN S27. [1]<br>Mus musculus mj39d07.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 478477 5'                               |
| OST3571 | gbiW75236   | 2.4e-113 | 91% | Mus musculus me53a07.rl Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 391188 5'  |
| OST3575 | gblAA080212 | 6.0e-90  | 93% | Mus musculus mj99a06.r1 Soares mouse<br>p3NMF19.5 Mus musculus cDNA clone<br>484210 5' similar to gb:X58079 S-100  |
| OST3579 | gbIS74622   | 1.1e-39  | 76% | PROTEIN, ALPHA CHAIN (HUMAN) Gallus gallus PP1M M21 subunit=protein phosphatase 1M 21 kda regulatory subunit (chickens, gizzard smooth muscle, mRNA, 1598 nt]            |
| OST3582 | gbIX74350   | 1.5e-74  | 99% | Mus musculus M. musculus XPAC Xerderma Pigmentosum group A Correcting gene, exon 6   |
| OST3601 | gbIU50078   | 4.6e-138 | 89% | Homo sapiens Human guanine nucleotide exchange factor p532 mRNA, complete cds  |
| OST3602 | gbIR15062   | 2.3e-107 | 90% | Homo sapiens yf86h05.r1 Homo sapiens cDNA clone 29483 5'   |
| OST3604 | gbIM22756   | 4.9e-119 | 84% | Rattus norvegicus Rat 24-kDa subunit<br>of mitochondrial NADH dehydrogenase<br>mRNA, 3' end  |
| OST3608 | gblU34994   | 5.4e-101 | 85% | Homo sapiens Human DNA-dependent   |

FIG. 8k

| APPROVED  | O.G. FIG. |            |  |  |  |  |
|-----------|-----------|------------|--|--|--|--|
| BY ·      | CLASS     | SUBCLASS ' |  |  |  |  |
| DHAFTSMAN |           |            |  |  |  |  |

|                    |                        | •        |       | protein kinase catalytic subunit<br>(DNA-PKcs) mRNA, complete cd              |
|--------------------|------------------------|----------|-------|---|
| OST3609            | gbIAA165901            | 2.4e-129 | 96%   | Mus musculus mt75e03.r1 Soares mouse  |
|                    | *                      |          |       | lymph node NbMLN Mus musculus cDNA clone 635740 5'                            |
| OST3631            | gbIAA028590            | 2.1e-152 | 97%   | Mus musculus mi21c12.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA   |
|                    |                        |          |       | clone 464182 5' similar to WP:R01H2.6   |
| OST3642            | gb R85211              | 1.4e-47  | 74%   | CE00805 UBC Homo sapiens yo41d11:s1 Homo sapiens                              |
|                    | · ·                    |          |       | cDNA clone 180501 3' similar to<br>SP:S19586 S19586 N-METHYL-D-ASPARTATE      |
|                    |                        |          |       | RECEPTOR GLUTAMATE-BINDING CHAIN-   |
| OST3645            | gbIM14951              | 1.3e-104 | 90%   | Mus musculus Mouse insulin-like growth factor II (IGF-II) mRNA. complete cds  |
| OST3647            | gbIU14721              | 1.7e-36  | 76%   | Mus musculus Mus musculus c-abl oncogene (c-abl) gene, exons 2 and 3,         |
|                    |                        |          |       | partial cds   |
| OST3651            | gbIAA023146            | 1.4e-109 | 91%   | Mus musculus mh67b03.r1 Soares mouse placenta 4NbMP13.5 14.5 Mus musculus     |
|                    |                        |          |       | cDNA clone 455981 5' similar to   |
|                    |                        |          |       | SW:A4P_HUMAN Q04941 INTESTINAL MEMBRANE A4 PROTEIN. [1]                       |
| OST3652            | gb S60494              | 3.1e-31  | 94%   | Mus sp. gamma-phosphorylase kinase (alternatively spliced) [mice, muscle,     |
|                    |                        |          |       | Balb/C, Genomic, 4204 nt, segment 4 of  |
| OST3662            | gblU37427              | 3.1e-204 | 96%   | 4]<br>Rattus norvegicus Rattus norvegicus                                     |
|                    | 0                      |          |       | phospholipid hydroperoxide glutathione  |
| OST3669            | gbIW55918              | 3.0e-35  | 86%   | peroxidase mRNA, complete cds<br>Homo sapiens zc03f12.s1 Soares               |
|                    |                        |          |       | parathyroid tumor NbHPA Homo sapiens cDNA clone 321263 3' similar to          |
| 0000000            | LIMEEOJJ               | 7.6.04   | 0.204 | WP:E04F6.2 CE01214  |
| OST3681            | gbIW55833              | 7.6e-94  | 93%   | Mus musculus md07b01.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA   |
|                    |                        |          |       | clone 367657 5' similar to gb:D37874<br>Mouse FcRn gene. (MOUSE)              |
| OST3694            | gblW38194              | 5.4e-71  | 93%   | Homo sapiens zc15e05.s1 Soares  |
|                    |                        |          |       | parathyroid tumor NbHPA Homo sapiens cDNA clone 322400 3'                     |
| OST3700            | gbIAA038243            | 4.9e-171 | 99%   | Mus musculus mi82d08.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone        |
|                    |                        |          |       | 473103 5' similar to SW:SARL_RABIT  |
| OST3703            | gbIW47847              | 7.8e-71  | 82%   | P42532 SARCOLIPIN. [1] Mus musculus mc82f12.r1 Soares mouse                   |
|                    | Ü                      |          |       | embryo NbME13.5 14.5 Mus musculus cDNA clone 355055 5'                        |
| OST3704            | gbIAA048648            | 4.6e-68  | 99%   | Mus musculus mj33a07.r1 Soares mouse  |
|                    |                        |          |       | embryo NbME13.5 14.5 Mus musculus cDNA clone 477876 5'                        |
| OST3708            | gbIAA002275            | 7.4e-89  | 97%   | Mus musculus mg43h01.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA   |
|                    |                        |          |       | clone 426577 5' similar to gb:M73704  |
| OST3716            | gbIAA034685            | 8.2e-119 | 90%   | PHOSPHATIDYLINOSITOL (HUMAN) Mus musculus mi56h10.r1 Soares mouse             |
|                    |                        |          |       | embryo NbME13.5 14.5 Mus musculus cDNA clone 467587 5' similar to gb:L19527   |
|                    |                        |          |       | 60S RIBOSOMAL PROTEIN L27   |
| OST3729            | gbIW19303              | 2.9e-97  | 85%   | Homo sapiens zb25d02.r1 Soares fetal lung NbHL19W Homo sapiens cDNA clone     |
|                    | gblW11502              | 1.3e-131 | 93%   | 303075 5'<br>Mus musculus ma80h06.r1 Soares mouse                             |
| OST3731            | gbtw11302              | 1.36-131 | 2370  | p3NMF19.5 Mus musculus cDNA clone   |
|                    |                        |          |       | 317051 5' similar to SW:PRCF_HUMAN P40306 PROTEASOME COMPONENT MECL-1         |
| <b>76</b> 7775     | abla'4014575           | E 20 100 | 0704  | PRECURSOR   |
| OST3735            | gbIAA014575            | 5.2e-100 | 97%   | Mus musculus mi67g07.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA   |
|                    |                        |          |       | clone 468636 5' similar to<br>SW:SYRM_YEAST P38714 ARGINYL-TRNA               |
| ma===              | - 1- WAITTOO 4         | 26.22    | 0.204 | SYNTHETASE, MITOCHONDRIAL PRECURSOR   |
| OST3757            | gbIW77924              | 2.6e-99  | 83%   | Homo sapiens zd71f04.r1 Soares fetal<br>heart NbHH19W Homo sapiens cDNA clone |
| NCT2750            | ablY64840              | 7.6e-51  | 97%   | 346111 5'<br>Mus musculus M. musculus ALF1 mRNA                               |
| OST3759<br>OST3767 | gblX64840<br>gblC18536 | 5.2e-39  | 69%   | Homo sapiens Human placenta cDNA  |
| OST3775            | gbID18282              | 1.6e-57  | 97%   | 5' -end GEN-563H06<br>Mus musculus Mouse 3' -directed cDNA,                   |
| • •                | J                      |          |       | MUSGS00768, clone md0842  |

FIG. 81

| APHILOVED | ับ.G. FIG. |          |  |  |  |  |
|-----------|------------|----------|--|--|--|--|
| BY        | CLASS      | SUBCLASS |  |  |  |  |
| DRAFTSMAN |            |          |  |  |  |  |

| OST3788            | gbIAA014426              | 9.7e-55             | 10%        | Mus musculus mg84b01.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA   |
|--------------------|--------------------------|---------------------|------------|---|
|                    |                          |                     |            | clone 439657 5' similar to SW:NB7M_BOVIN QO2367 NADH-UBIQUINONE   |
| OST3789            | gblD13544                | 9.5e-67             | 97%        | OXIDOREDUCTASE B17 SUBUNIT Mus musculus Mouse mRNA for primase small subunit, complete cds  |
| OST3807            | gbIW26968                | 3.8e-51             | 80%        | Homo sapiens 16h7 Human retina cDNA<br>randomly primed sublibrary Homo  |
| OST3818            | gbIM28248                | 3.8e-48             | 96%        | sapiens cDNA<br>unidentified cloning vector Moloney<br>murine leukemia virus retroviral   |
| OST3819            | gbIT55632                | 3.8e-35             | 81%        | vector pLXSN, complete genome Homo sapiens yb39b03.r1 Homo sapiens cDNA clone 73517 5' similar to   |
| OST3827            | gbIAA046830              | 1.2e-67             | 84%        | SP:T20G5.10 CE00629<br>Homo sapiens zf12h11.s1 Soares fetal<br>heart NbHH19W Homo sapiens cDNA clone  |
| OST3831            | gbIW70777                | 3.5e-121            | 99%        | 376773 3' Mus musculus mr44a02.rl Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA   |
| OST3839            | gbIM86008                | 1.4e-103            | 86%        | clone 390314 5' Homo sapiens EST02533 Homo sapiens cDNA clone HFBCY19 similar to  |
| OST3843            | gblZ82190                | 2.8e-51             | 88%        | Hypothetical 43.5K protein Homo sapiens Human DNA sequence *** SEQUENCING IN PROGRESS *** from clone  |
| OST3849            | gbIW64986                | 1.3e-173            | 94%        | 180M12; HTGS phase 1<br>Mus musculus me04c05.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 386504 5' similar to<br>SW:VSH7_DICDI P14327 VEGETATIVE                 |
| OST3851            | gbIU51037                | 1.0e-135            | 84%        | SPECIFIC PROTEIN H7. [1] Mus musculus Mus musculus 11-zinc-finger transcription factor  |
| OST3858            | gbIX56135                | 4.7e-237            | 97%        | (CTCF) mRNA, complete cds Mus musculus Mouse mRNA for prothymosin alpha   |
| OST3864            | gblD19493                | 9.8e-33             | 95%        | Mus musculus Mouse 3' -directed cDNA,   |
| OST3869            | gblW41525                | 4.4e-100            | 85%        | MUSGS00881, clone mb0610 Mus musculus mc45b04.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone   |
| OST3897            | gbIW10485                | 3.8e-97             | 95%        | 351439 5' Mus musculus ma53e06.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone  |
| OST3903            | gbIW59388                | 1.2e-108            | 86%        | 314434 5' Mus musculus md79f02.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 374619 5' similar to gb:U07151 ADB-RIBOSYLATION FACTOR-LIKE PROTEIN 3 (HUMAN)               |
| OST3905<br>OST3909 | gbID85430<br>gbIAA020459 | 8.0e-102<br>1.2e-80 | 92%<br>94% | Mus musculus Mouse Murr1 mRNA, exon Mus musculus mh61a06.r1 Soares mouse placenta 4NbMP13.5 14.5 Mus musculus   |
| OST3917            | gblZ44044                | 8.7e-81             | 87%        | cDNA clone 455410 5'<br>Homo sapiens H. sapiens partial cDNA  |
| OST3924            | gblJ04699                | 3.9e-32             | 84%        | sequence; clone c-lrc07 Mus musculus Mouse nicotinic acetylcholine receptor beta subunit  |
| OST3925            | gblW23511                | 1.2e-88             | 76%        | (nAChRE) gene, complete cds<br>Homo sapiens zb46e02.r1 Soares fetal<br>lung NbHL19W Homo sapiens cDNA clone   |
| OST3931            | gblU14957                | 1.6e-36             | 81%        | 306650 5' Homo sapiens Human 53K isoform of Type II phosphatidylinositol-4-phosphate  |
| OST3945            | gblW15004                | 1.6e-122            | 97%        | 5-kinase (PIPK) mRNA, complete cds<br>Mus musculus mb25c09.r1 Soares mouse<br>p3NMF19.5 Mus musculus cDNA clone   |
| OST3957            | gbIAA051293              | 2.8e-143            | 96%        | 330448 5' Mus musculus mj40h10.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 478627 5' similar to SW:TGFB_HUMAN P22064 TRANSFORMING GROWTH FACTOR BETA-1 BINDING PROTEIN |
| OST3960            | gbiD38614                | 1.1e-88             | 82%        | PRECURSOR Mus musculus Mouse 921-S mRNA for presynantic protein, complete cds   |
| OST3961            | gbIU67988                | 6.6e-37             | 77%        | presynaptic protein, complete cds<br>Homo sapiens Human guanylate kinase<br>associated protein (GKAP) mRNA,<br>complete cds   |

FIG. 8m

| AFPROVED  | ပ.a. i | FIG.     |
|-----------|--------|----------|
| BY        | CLASS  | SUBCLASS |
| DHAFTSMAN |        |          |

|                    | <del>- 11</del>        |                    |            |   |
|--------------------|------------------------|--------------------|------------|---|
| OST3971            | gblW45926              | 9.6e-55            | 94%        | Mus musculus mc79e04.rl Soares mouse  |
| OST3988            | gbIM13524              | 2.6e-111           | 90%        | embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 354750 5'<br>Mus musculus Mouse serum amyloid A   |
| OST3993            | gblR16778              | 4.7e-45            | 82%        | pseudogene (psi-SAA) Homo sapiens yf33a08.s1 Homo sapiens   |
| OST4002            | gblAA000314            |                    | 96%        | cDNA clone 128630 3'  |
| 0314002            | gbiAA000314            | 1.9e-112           | 3070       | Mus musculus mg34e07.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 425700 5'   |
| OST4003            | gblL37297              | 2.9e-121           | 91%        | Mus musculus Mus musculus (clone B6)<br>myeloid secondary granule protein mRNA  |
| OST4011            | gbIL26664              | 2.0e-155           | 94%        | Mus musculus Mus musculus expressed sequence tag EST F032   |
| OST4028            | gbID87470              | 7.5e-93            | 92%        | Homo sapiens Human mRNA for KIAA0280 gene, partial cds  |
| OST4033            | gbIAA084704            | 2.2e-54            | 88%        | Homo sapiens zn05f04.s1 Stratagene hNT<br>neuron (#937233) Homo sapiens cDNA<br>clone 546559 3' similar to TR:G600529<br>G600529 NADH UBIQUINONE OXIDOREDUCTASE<br>SUBUNIT                        |
| OST4051            | gbIF03500              | 7.6e-63            | 86%        | Homo sapiens H. sapiens partial cDNA sequence; clone c-lzd08  |
| OST4061            | gblW30618              | 3.1e-118           | 97%        | Mus musculus mc10h12.r1 Soares mouse<br>p3NMF19.5 Mus musculus cDNA clone   |
| OST4070            | gblW36515              | 6.0e-135           | 94%        | 348167 5' Mus musculus mb76g12.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone  |
| OST4073            | gblX82021              | 2.0e-105           | 91%        | 335398 5' Rattus norvegicus R. norvegicus mRNA  |
| OST4074            | gbID63704              | 3.3e-140           | 86%        | for heat shock related protein Rattus norvegicus Rat mRNA for dibudropyrindinase, complete cds  |
| OST4106            | gbIW75804              | 1.1e-84            | 93%        | dihydropyrimidinase, complete cds<br>Mus musculus me67a06.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 400594 5'  |
| OST4114            | gbIW20730              | 6.5e-90            | 96%        | Mus musculus mb96g01.r1 Soares mouse<br>p3NMF19.5 Mus musculus cDNA clone<br>337296 5'  |
| OST4131            | gbIAA044274            | 2.4e-33            | 69%        | Homo sapiens zk54h03.s1 Soares<br>pregnant uterus NbHPU Homo sapiens<br>cDNA clone 486677 3'  |
| OST4134            | gblH31489              | 3.0e-84            | 85%        | Rattus sp. EST105564 Rattus sp. cDNA<br>3' end  |
| OST4140            | gbIW71052              | 3.7e-121           | 91%        | Mus musculus me27f01.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 388729 5' similar to SW:YBHB_YEAST P38182 HYPOTHETICAL 13.6 KD PROTEIN IN PET112-ILS1 INTERGENIC REGION. [1]    |
| OST4142<br>OST4144 | gblC07091<br>gblX56135 | 5.7e-74<br>4.4e-41 | 89%<br>83% | Rattus norvegicus similar to none<br>Mus musculus Mouse mRNA for<br>prothymosin alpha   |
| OST4148            | gbIW54510              | 1.5e-135           | 91%        | Mus musculus md08h09.r1 Soares mouse<br>embryo NbME13.5 14.5 Mus musculus cDNA<br>clone 367841 5' similar to PIR:A56059<br>A56059 protein-tyrosine-phosphatase                                    |
| OST4149            | gbIU36393              | 2.6e-111           | 96%        | Mus musculus Mus musculus<br>transcription factor TFEB mRNA,<br>partial cds   |
| OST4154            | gbIX56046              | 1.3e-161           | 96%        | Mus musculus Mouse mRNA (clone lambda-16) for hypothetical protein A  |
| OST4155            | gbIX05900              | 3.5e-58            | 85%        | Rattus norvegicus Rat mRNA for lens<br>betaB1-crystallin (pRLbeta B1-3)   |
| OST4166            | gbIU53859              | 8.0e-169           | 90%        | Rattus norvegicus Rattus norvegicus calpain small subunit (cssl) mRNA, partial cds  |
| OST4174            | gbIU41395              | 1.3e-38            | 84%        | Mus musculus Mus musculus X inactive specific transcript (Xist) gene, cosmid MB4-14A, fragment 2  |
| OST4191<br>OST4192 | gbIX63507<br>gbIW85357 | 2.0e-75<br>2.2e-83 | 81%<br>82% | Mus musculus M. musculus HOX-3.5 gene Mus musculus mf49h12.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 408455 5' similar to SW:GLYM HUMAN p34897 SERINE HYDROXYMETHYLTRANSFERASE |
| OST4194            | gbIW34635              | 8.9e-38            | 87%        | MITOCHONDRIAL Mus musculus mc31e07.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone 350148 5'  |

FIG. 8n

| AY TOVED  | O.G. 1 | O.G. FIG. |  |
|-----------|--------|-----------|--|
| BY        | CLASS  | SUBCLASS  |  |
| DEAFTSMAN |        |           |  |

| OST4196 | gblW41301   | 3.1e-39  | 99% | Mus musculus mc43h06.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone   |
|---------|-------------|----------|-----|--|
| OST4223 | gbIAA203787 | 2.7e-89  | 90% | 351323 5'' Mus musculus mu60f12.r1 Soares mouse lymph node NbMLN Mus musculus cDNA   |
| OST4228 | gblS51016   | 9.3e-205 | 92% | clone 643823 5'<br>Bos taurus E2 (25K) =multiubiquitinating  |
| OST4229 | gblZ31263   | 4.9e-70  | 97% | enzyme (cattle, thymus, mRNA, 825 nt) Mus musculus M. musculus expressed   |
| OST4235 | gbIW53187   | 3.0e-173 | 97% | embryo NbME13.5 14.5 Mus musculus cDNA clone 368820 5' similar to WP: C32D5.9  |
| OST4243 | gblAA048921 | 2.3e-4.0 | 86% | CE01849 Mus musculus mj47e11.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 479276 5' similar to gb:U13705 Mus musculus domesticus C57BL/6J plasma glutathione (MOUSE) |
| OST4245 | gblH10216   | 9.9e-80  | 75% | Homo sapiens ym02f05.s1 Homo sapiens<br>cDNA clone 46710 3'  |
| OST4247 | gbIAA023146 | 1.5e-115 | 96% | Mus musculus mh67b03.r1 Soares mouse placenta 4NbMP13.5 14.5 Mus musculus cDNA clone 455981 5' similar to SW:A4P_HUMAN Q04941 INTESTINAL   |
| OST4251 | gbIAA070774 | 8.7e-154 | 98% | MEMBRANE A4 PROTEIN. [1]<br>Homo sapiens zm53g11.s1 Stratagene<br>fibroblast (#937212) Homo sapiens cDNA   |
| OST4254 | gbIW54737   | 2.4e-82  | 10% | clone 529412 3' Mus musculus md10a04.r1 Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 367950 5'  |
| OST4258 | gbIAA013789 | 4.3e-169 | 90% | Mus musculus mh13d03.r1 Soares mouse placenta 4NbMP13.5 14.5 Mus musculus cDNA clone 442373 5' similar to  |
| OST4281 | gbIU16175   | 4.0e-40  | 63% | PIR:JC2472 JC2472 RE protein - human<br>Mus musculus Mus musculus<br>thrombospondin 3 (Thbs3) gene, partial<br>cds and mucin 1 (Muc1) gene, complete<br>cds                          |
| OST4283 | gbIAA007519 | 8.9e-52  | 81% | Homo sapiens zh98e12.r1 Soares fetal<br>liver spleen 1NFLS S1 Homo sapiens<br>cDNA clone 429358 5'   |
| OST4288 | gbIAA000024 | 1.4e-135 | 96% | Mus musculus mg33e06.rl Soares mouse embryo NbME13.5 14.5 Mus musculus cDNA clone 425602 5' similar to gb:X03920_rna2 M. musculus GSHPx gene (MOUSE)                                 |
| OST4315 | gbIM18210   | 6.4e-62  | 96% | Mus musculus Mouse transcription factor S-II. clone PSII-3   |
| ST4319  | gbIJ04696   | 2.0e-127 | 95% | Mus musculus Mouse glutathions<br>S-transferase class mu (GST5-5) mRNA,<br>complete cds  |